

REMARKS

Claims 1 to 18 are pending. Claim 16 has been withdrawn from consideration, but may be rejoined if the elected invention is found patentable. Claims 1, 12 and 15 have been amended. Bases for the claim amendments are at specification page 2, lines 1-7, page 3, line 26–page 4, line 1, page 5, lines 12-16 and page 11, lines 24-29.

Claims 1-11 and 17-18 have been rejected under 35 USC § 112, first paragraph. This rejection has been avoided by the amendment to claim 1, limiting the oils to non-silicone-based oils.

Claims 1-5, 7-8, 17 and 18 have been rejected under 35 USC § 102(b) as anticipated by Martin U.S. Patent 5,264,027. This rejection is avoided by the amended claims.

There are a number of claim elements missing from the disclosure of Martin:

- 1) a lubricant selected from mineral, pine, paraffin oils, oleic acid, glycerol, and propylene glycols (claim 1); and
- 2) a requirement for less than 0.2% non-volatile silicones (claim 1);

As to 1, the Office Action (pages 3-4) relies on the recitation of oleic acid in Martin, but this reliance is misplaced. Although oleic acid is mentioned at Martin column 7, line 26, it is not as a lubricant in the final composition, but rather as a reactant. The disclosure in Martin column 7 preceding line 26 states that when a surfactant, which may be employed in the compositions of Martin, is a salt such as an amine salt, the amine and the acid portion of the amine salt are added separately to the reaction mixture or are added as separate components of the reaction mixture and the amine salt surfactant is formed in situ. Martin gives as an example adding oleic acid to morpholine to make morpholine oleate. Martin never says the oleic acid is part of his detergent resistant composition. He says it reacts in situ to form a surfactant. The Examiner has stated his position that, “this acid will be part of the final composition or at least is part of the initial composition, which applicatns do not distinguish over.” To the contrary, Martin makes no contention that his initial composition in Example 4 (pointed out by the Examiner) is a polish. He says that the oleic acid reacts with morpholine to form morpholine oleate. There is no emulsion until there is a surfactant. Therefore, oleic acid is not present in an emulsion composition in Martin which is required if it is to anticipate the present claims.

As to 2, the Examiner has taken the position (Office Action p. 4) that, “the hydrocarbonoxy end-blocked branched organopolysiloxanes ... is volatile absent evidence to the contrary and since applicants do not define the extent of non-volatility.” Martin requires 0.5 to 20% of the hydrocarbonoxy end-blocked branched organopolysiloxanes (col. 2, l. 13 and col. 4, ll. 62-65), greater than the less than 0.2% allowed in the rejected claims. The evidence that these materials are non-volatile lies within Martin itself. At column 2, lines 1-6, Martin states that his invention has the object of providing a detergent resistant polish emulsion that gives a durable coating. At column 2, lines 9-14, Martin says that he accomplished his objective by using compositions containing hydrocarbonoxy end-blocked branched organopolysiloxane. It would not be reasonable to presume that his hydrocarbonoxy end-blocked branched organopolysiloxanes are volatile (i.e., evaporate) since in order to lend the property of detergent resistance to the polish (and to polished articles such as the test panels Martin describes in his examples, see column 9) these organopolysiloxanes must remain on the surface. Martin’s objectives can only be achieved if his organopolysiloxanes remain on the surface.

The fact that Martin’s polysiloxanes are non-volatile can also be illustrated by his Detergent Resistant Test Method at column 9, lines 20-54. Martin’s polish is applied with a cotton cloth on painted panels, dried for 45 minutes, polished with a new cotton cloth and then aged in an oven at 100° C for one hour. The panels are then scrubbed with a detergent solution. Through the heat aging and scrubbing, Martin’s polish coating still remains on the painted panels. Therefore, the Examiner’s assertion that Martin’s hydrocarbonoxy end-blocked branched organopolysiloxanes are volatile, is not fairly based. The basis for believing they are non-volatile is stated above.

The Examiner has said that applicants do not define the extent of non-volatility (office action p.4). To the contrary, claim 1 requires that a volatile siloxane have a boiling point less than 250°C; which, by implication means that non-volatile silicone materials have a boiling point of at least 250°C.

Volatile siloxanes are discussed at specification page 3, line 26- page 4, line 4. In that passage, viscosity is also stated as a defining characteristic of volatile siloxanes versus non-volatile siloxanes. Therefore, claim1 has been amended by limiting the non-volatile silicone material to certain viscosity ranges. Martin column 3, lines 58 – 61, states that the viscosity of his organopolysiloxane fluids may range from about 5 to about 20,000 mPa·s, more preferably from

about 500 to 10,000 mPa·s. In that passage, Martin does not specify whether or not the siloxanes are cyclic. The Example hydrocarboxy end-blocked branched organopolysiloxanes in Martin (both of which appear to contain cyclic siloxanes) have viscosities of 350 mPa·s and 20 mPa·s (col. 10, lines 4 and 21). The units of viscosity stated in Martin are absolute viscosity; whereas, the units stated in the amended claims (and the present application) are kinematic viscosity. To convert from mPa·s to the kinematic viscosity units of centistokes (cSt), one would divide by specific gravity. In order for a liquid having an absolute viscosity of 20 mPa·s to have a kinematic viscosity less than 7 centistokes, it would have to be extremely dense (specific gravity greater than 2) which is very unlikely. For example, the specific gravity of the Dow Corning 200 Fluid silicone used in Comparative Example B of the present application is said to be 0.913. In short, Martin's hydrocarboxy end-blocked branched organopolysiloxanes are within the viscosity ranges stated in amended claim 1 for non-volatile silicone materials, which are to be kept below 0.2 percent in the amended claims. Martin's organopolysiloxane is present in an amount of 0.5 to 20% (claim 6).

The presently claimed compositions use volatile siloxanes to provide improved handling properties in the finishing composition. After application, they evaporate. Non-volatile (viscous) silicones are minimized in the presently claimed finishing compositions because they can cause problems in vehicle refinishing, (paint defects and contamination of surfaces in a body shop) see specification page 3, lines 6-12, page 9, lines 22-25 (fisheye beading on a paint job), and page 24, lines 3-11.

Since Martin does not disclose the required lubricant and has substantially more than 0.2% non-volatile silicone material present in his hydrocarboxy end-blocked branched organopolysiloxanes, he does not anticipate claims 1-5, 7, 8, 17 and 18 as amended.

Claim 6 has been rejected under 35 USC § 103(a) as obvious over Martin in view of Ogawa U.S. patent 5,645,633. This rejection is traversed.

The Examiner has noted Ogawa's recitation of alumina abrasive particles in a finishing composition within the particle size of claim 6. However, there are a number of reasons why the combination of Ogawa with Martin does not make claim 6 obvious.

The whole Ogawa patent relates to non-aqueous compositions for car finishes and other applications (see abstract, column 1, lines 16-19, 40-42, and 52; column 2, lines 43-46; column 10, lines 44 – column 12, line 25 and claim 1). Present claim 6 (being dependent from claim 1)

requires water in the composition. Any emulsion requires water. Ogawa's compositions are not emulsions; whereas, Martin's are. There is no reason to combine Ogawa's nonaqueous compositions with Martin's teaching on aqueous emulsions.

Ogawa's invention is based on using non-volatile silicones to protect surfaces (column 1, lines 48-51, example 1 and claim 1). Thus, Ogawa, teaches away from the present claims which all require the claimed finishing compositions to be substantially free of non-volatile silicone materials.

Claims 9-11 have been rejected under 35 USC § 103(a) as obvious over Martin. This rejection is traversed. The differences stated above between claim 1 and Martin, are present with regard to claims 9-11. In order to have claims 9-11, one would have to modify Martin by: adding a lubricant selected from the Markush group of claim 1; and eliminate the non-volatile silicones which are required in Martin's detergent-resistant compositions. Neither of these modifications is obvious given the skill in the art.

The Examiner has referred to the amount of oleic acid mentioned in Martin at column 12, line 7. As stated above, oleic acid is in Martin's formulation to form morpholine oleate as a surfactant by a chemical reaction with morpholine. Oleic acid is not present in Martin's formulation as a lubricant. It is not in the composition at all after it has reacted with morpholine. The fact that oleic acid is a raw material in Martin, does not mean it remains intact as part of his polish composition which it must to impact the obviousness of claims 9-12.

Claims 12-13 have been rejected under 35 U.S.C. 103(a) as obvious over Martin in view of Ogawa. This rejection is avoided by the amended claims.

The same differences exist between Martin and claims 12 – 13 as exist between claim 1 and Martin, as discussed above: 1) no lubricant selected from the claimed Markush group; and 2) more than 0.2% non-volatile silicones in Martin's detergent resistant compositions. The same rationale applied above with regard to the obviousness of claim 6 is applicable to this rejection. Neither Martin nor Ogawa teaches a finishing composition: comprising a non-silicone based lubricant selected from mineral, pine and paraffinic oils, oleic acid, glycerol, and polypropylene glycols; or containing less than 0.2 percent non-volatile silicones. Martin specifies 0.5 to 20% of hydrocarbonoxy end-blocked branched organopolysiloxanes, and Ogawa uses about 26% of a silicone oil (1000 cps viscosity) in his Example 1, both being substantially more than the 0.2%

allowed in rejected claims 12-13. Ogawa's invention is based on using non-volatile silicones to protect surfaces (Ogawa column 1, lines 48-51 and example 1). Ogawa's finishing agents are nonaqueous, and they are not emulsions; while, Martin's are aqueous emulsions. Thus, there is no reason to combine Ogawa with Martin, and even if one did, the result would not be the finishing compositions of claims 12 and 13.

Claim 14 has been rejected under 35 U.S.C. 103(a) as obvious over Martin in view of Sejpka U.S. patent 5,261,951. This rejection is traversed.

Sejpka would not be combined with Martin to make the invention of claim 14. Claim 14 is to the finishing composition of claim 12 with further limitations. Both claims 12 and 14 require a volatile hydrocarbon solvent; whereas, Sejpka teaches a car polish that is solvent-free (abstract and col. 8, ll. 1-4). Both claims 12 and 14 require a lubricant selected from a Markush group given in claim 12; whereas, there is no such lubricant disclosed in Sejpka. There is no reason why one should borrow certain features from Sejpka (such as thickener) while ignoring Sejpka's teaching that the composition should be free of solvent, and then combine that teaching with Martin's which says to use solvent. There is also no reason found in the teachings of Martin or Sejpka, which make no mention of such lubricants, for a skilled person to use a lubricant from the Markush group of claim 12.

Both Sejpka's and Martin's compositions utilize non-volatile silicones. The presence of such non-volatile silicones in Martin has already been discussed above. Sejpka teaches to use them at column 1, lines 56-57 and claim 1, in which he requires organopolysiloxanes that are solid at room temperature. One would have to limit non-volatile silicones to a maximum concentration of <0.2% to arrive at rejected claim 14; while there is no indication in either reference to make such a modification, and there is only the smallest overlap with Sejpka's concentration range, column 4, line 6 (0.1-5.0%).

Claim 15 has been rejected under 35 USC § 103(a) as obvious over Martin. This rejection is traversed.

The method of claim 15 requires: a lubricant selected from oils, oleic acid, glycerol, polypropylene glycols, and combinations thereof; and <0.2% non-volatile silicones above certain viscosity limits. Regardless of sequence of method steps, Martin does not disclose using such lubricants or limiting non-volatile silicones to <0.2% of the composition in a method for making a

composition. That Martin's hydrocarbonoxy end-blocked branched organopolysiloxanes are non-volatile silicones is discussed above. Thus, Martin does not provide disclosure of two significant limitations of claim 15.

Claims 1-15, 17 and 18 have been rejected under 35 U.S.C. 103(a) as obvious over Martin in view of Brandl U.S. Patent 3,847,622, Ogawa and Sejpka. This rejection is avoided by the claim amendments.

Although the Examiner has correctly noted Brandl's teaching regarding lubricants, there are substantial reasons why the combination of Brandl with the other patents does not render the present claims obvious. Brandl is a teaching on a process for preparing stable water in oil emulsion polish compositions and such compositions themselves (abstract and claims).

Brandl's compositions use silicones having viscosities above 20 centistokes (col. 2, ll. 34-36, 53-60 and col. 4, ll. 16-20). He says these silicones must be present in amounts ranging from 0.5 to 9 percent of total composition (col. 5, ll. 17-20). These silicones, like those of Martin, have viscosities well within the viscosity ranges now specified in the amended claims for non-volatile silicones which must be kept below 0.2%.

Also like Martin, Brandl makes a polish composition that is detergent resistant (col. 5, l. 30) and, therefore, his polysiloxanes are not volatile. Both Brandl and Martin teach polish compositions intended to remain on a surface after they are applied and buffed. The present claims relate to finishing compositions, which (as explained in the Background section of the application, p.1, ll. 13-18) are to remove paint defects on a vehicle, i.e., they are applied to a surface to remove scratches and imperfections in a paint job and then are removed (see description of Surface Energy Test at specification p.9). The present invention is made to improve paint jobs in body shops by not leaving any silicone or oily residue that can harm a paint job. Compositions like those of Martin and Brandl may be fine polishes, but they would not function as finishing compositions, since they are intended to leave viscous silicones on the surface as a protective, detergent resistant polish.

Differences between claim 15 and the primary reference are recounted above. Brandl may add mineral oil lubricants, but he also makes a water in oil emulsion. The same reasoning as expressed above exists contrary to the obviousness of claim 15, and Brandl does not make the claim 15 process any more obvious.

Claim 18 requires that no non-volatile silicones be used in making the claimed finishing composition, which distinguishes claim 18 from all four references, which all have some requirement for non-volatile silicone, including Sejpka since his lowest amount for organopolysiloxanes (which are non-volatile since they are solid at room temperature (col. 1, l. 56) ingredients of a polish intended to stay on the substrate) is 0.1% (col. 4, l. 6).

It is not obvious to combine Brandl with Martin, because: Martin is an oil water emulsion; whereas, Brandl is a water in oil emulsion; Brandl uses lubricants like mineral oil that are not taught in Martin; and Martin utilizes cyclic siloxanes such as octamethylcyclotetrasiloxane (relatively volatile) while Brandl does not.

It is not obvious to combine Ogawa with either Martin or Brandl, because Ogawa is non-aqueous; whereas, both Martin's and Brandl's compositions contain substantial amounts of water.

It is not obvious to combine Sejpka with Martin, Ogawa or Brandl because the latter three patents teach compositions containing solvent; whereas, Sejpka states that his compositions are free of solvent.

It is not obvious to combine all four cited patents, discarding parts of them that do not help in establishing obviousness, and piecing together just the excerpts that may be helpful in making a case of obviousness. This rejection uses the claims as a pattern for selection of components from the references; while, ignoring parts of the reference teachings inconsistent with the assertion of obviousness and teachings within the references that make combining them unlikely or illogical. Such a rejection requires hindsight, using the rejected claims as a guide to take what is needed from the prior art, instead of using the prior art as a guide to show what it teaches.

Claims 1-5, 17 and 18 have been rejected under 35 U.S.C. 102(e) as anticipated by or in the alternative under 35 U.S.C. 103(a) as obvious over Scheper U.S. Patent 6,734,153. This rejection is avoided in part by the amended claims and is traversed in part.

Scheper is a teaching on fabric treatment methods and compositions for use in dry cleaning (abstract, column 1, line 9-column 2, line 2, column 14, lines 1-10). There are substantial differences between Scheper and the rejected claims. Scheper's compositions contain:

1. no lubricants within the Markush group of claim 1. One interested in a dry cleaning composition would not intentionally add oils. The Office Action (p.7) asserts that Scheper's compositions contain an oil (wrinkle reducing agent); however, the only oil listed as a wrinkle

reducing agent (column 7, line 21) is sulfated castor oil which does not fall within the Markush group of oils now claimed.

2. no volatile hydrocarbon solvents. The Examiner has cited Scheper's disclosure of alcohol to anticipate the present claim requirement for volatile hydrocarbon solvent. However, alcohols are not hydrocarbons, but are a recognized separate class of chemicals.
3. at least 50% lipophilic fluid comprising his siloxane (Scheper claim 1); whereas, rejected claim 2 specifies that volatile siloxane constitutes about 3-20% of the claimed finishing composition.

In view of the above differences between the amended claims and Scheper, the reference does not anticipate the claims. Neither does it make the claims obvious. Scheper teaches an organic solvent based composition to remove stains in dry cleaning. In order for one skilled in the art to arrive at the compositions of claims 1-5, 17 and 18 from the disclosure of Scheper, he would have to modify Scheper by: adding a lubricant within the now claimed Markush group despite the fact that it would ruin a dry cleaning fluid; adding a volatile hydrocarbon solvent despite the absence of any indication to do so in Scheper; and (as to claim 2) limiting volatile siloxane content to 3-20%, despite Scheper's teaching that his lipophilic fluid should be more than 50% of the composition. Such modifications are too substantial to be obvious and would not make sense.

In view of the above discussion, it is respectfully submitted that claims 1-18, as amended, are in condition for allowance. Withdrawal of the rejections under 35 U.S.C. 112, 102, and 103 is requested and a notification of allowability is solicited. If any issues or questions remain the resolution of which the Examiner feels would be advanced by a conference with Applicants' attorney, he is invited to contact such attorney at the telephone number below.

Respectfully submitted,

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